

AMENDMENTS TO THE CLAIMS

Please cancel claim 1.

Please cancel claim 2.

Please cancel claim 3.

4. (Currently Amended) A personal radio service (PRS) device configured to engage in private, short-range two-way voice communications with other PRS devices in range of the PRS device,

The PRS device of claim 3, further comprising:

\_\_\_\_\_ a GPS receiver disposed in the PRS device;

\_\_\_\_\_ a radio frequency (RF) transceiver configured both to modulate and transmit voice communications and positioning data received from said GPS receiver, and also to demodulate voice communications and positioning data received from the other PRS devices in range of the PRS device;

\_\_\_\_\_ an encoder/decoder circuit for encoding positioning data for transmission by said RF transceiver; and,

\_\_\_\_\_ an identification tone generator for generating identification tones, said encoder encoding said positioning data in said generated identification tones for transmission by said RF transceiver.

Please cancel claim 5.

Please cancel claim 6.

7. (Currently Amended) A personal radio service (PRS) device configured to engage in private, short-range two-way voice communications with other PRS devices in range of the PRS device,

~~t~~The PRS device of claim 6 further comprising:

\_\_\_\_\_ a GPS receiver disposed in the PRS device;

\_\_\_\_\_ a radio frequency (RF) transceiver configured both to modulate and transmit voice communications and positioning data received from said GPS receiver, and also to demodulate voice communications and positioning data received from the other PRS devices in range of the PRS device; and,

\_\_\_\_\_ a visual display for displaying position information based upon said positioning data, wherein said displayed position information comprises a bearing and range of another PRS device with which the PRS device is engaged in private, short-range, two-way voice communications.

Please cancel claim 8.

Please cancel claim 9.

Please cancel claim 10.

Please cancel claim 11.

Please cancel claim 12.

13. (Currently Amended) In a Personal Radio Services (PRS) device, a PRS communications

~~t~~The method of claim 12, wherein said modulating step comprises the steps of:

\_\_\_\_\_ establishing a private, two-way, short-range voice communications link with at least one other PRS device;

\_\_\_\_\_ establishing a data link with a positioning data transmitter and receiving positioning data from said positioning data transmitter;

\_\_\_\_\_ processing said positioning data to determine location-based information associated with the PRS device;

\_\_\_\_\_ modulating said positioning data onto a carrier signal which can be transmitted over said private, two-way, short-range voice communications link, and transmitting said modulated positioning data to said another PRS device, said modulating step comprising the steps of encoding said positioning data in an identification tone; ~~and~~, modulating said identification tone onto a carrier signal which can be transmitted over said private, two-way, short-range voice communications link; and, transmitting said modulated positioning data to said another PRS device;

\_\_\_\_\_ receiving modulated positioning data from said at least one other PRS device over said private, two-way short-range voice communications link, and demodulating said received modulated positioning data;

\_\_\_\_\_ processing said demodulated positioning to determine further location-based information associated with said at least one other PRS device; and,

\_\_\_\_\_ displaying said location-based information and said further location-based information in the PRS device.

whereby said displaying of said location-based information and said further location-based information can indicate a relative position of each PRS device participating in said two-way short-range voice communications link.

14. (Currently Amended) In a Personal Radio Services (PRS) device, a PRS communications

The method of claim 12, wherein said demodulating step comprises the steps of:

establishing a private, two-way, short-range voice communications link with at least one other PRS device;

establishing a data link with a positioning data transmitter and receiving positioning data from said positioning data transmitter;

processing said positioning data to determine location-based information associated with the PRS device;

modulating said positioning data onto a carrier signal which can be transmitted over said private, two-way, short-range voice communications link, and transmitting said modulated positioning data to said another PRS device;

receiving modulated positioning data from said at least one other PRS device over said private, two-way short-range voice communications link, and demodulating said received modulated positioning data, said demodulating step comprising the steps of receiving a modulated identification tone in a carrier signal from said another PRS device over said private, two-way short-range voice communications link; demodulating said received modulated identification tone; and, decoding positioning data in said identification tone;

processing said demodulated positioning to determine further location-based information associated with said at least one other PRS device; and,  
displaying said location-based information and said further location-based information in the PRS device,  
whereby said displaying of said location-based information and said further location-based information can indicate a relative position of each PRS device participating in said two-way short-range voice communications link.

15. (Currently Amended) In a Personal Radio Services (PRS) device, a PRS communications

The method of claim 1, further comprising the steps of:

establishing a private, two-way, short-range voice communications link with at least one other PRS device;

establishing a data link with a positioning data transmitter and receiving positioning data from said positioning data transmitter;

processing said positioning data to determine location-based information associated with the PRS device;

modulating said positioning data onto a carrier signal which can be transmitted over said private, two-way, short-range voice communications link, encoding said positioning data using a privacy code prior to said transmission, said privacy code restricting access to said positioning data by other PRS devices, and transmitting said modulated positioning data to said another PRS device;

receiving modulated positioning data from said at least one other PRS device over said private, two-way short-range voice communications link, and demodulating said received modulated positioning data;

processing said demodulated positioning to determine further location-based information associated with said at least one other PRS device; and,

displaying said location-based information and said further location-based information in the PRS device,

whereby said displaying of said location-based information and said further location-based information can indicate a relative position of each PRS device participating in said two-way short-range voice communications link.

Please cancel claim 16.

Please cancel claim 17.

18. (Currently Amended) A ~~The~~ machine readable storage having stored thereon a computer program for Personal Radio Services (PRS) communications in a PRS device, the computer program comprising a routine set of instructions which when executed by a machine causes the machine to perform ~~of claim 17, wherein said modulating step comprises~~ the steps of:

establishing a private, two-way, short-range voice communications link with at least one other PRS device;

establishing a data link with a positioning data transmitter and receiving positioning data from said positioning data transmitter;

processing said positioning data to determine location-based information associated with the PRS device;

modulating said positioning data onto a carrier signal which can be transmitted over said private, two-way, short-range voice communications link, and transmitting said modulated positioning data to said another PRS device, said modulating step comprising the steps of encoding said positioning data in an identification tone; and, modulating said identification tone onto a carrier signal which can be transmitted over said private, two-way, short-range voice communications link; and, transmitting said modulated positioning data to said another PRS device;

receiving modulated positioning data from said at least one other PRS device over said private, two-way short-range voice communications link, and demodulating said received modulated positioning data;

processing said demodulated positioning to determine further location-based information associated with said at least one other PRS device; and,

displaying said location-based information and said further location-based information in the PRS device,

whereby said displaying of said location-based information and said further location-based information can indicate a relative position of each PRS device participating in said two-way short-range voice communications link.

19. (Currently Amended) A The machine readable storage having stored thereon a computer program for Personal Radio Services (PRS) communications in a PRS device, the computer

program comprising a routine set of instructions which when executed by a machine causes the machine to perform of claim 17, wherein said demodulating step comprises the steps of:

\_\_\_\_\_ establishing a private, two-way, short-range voice communications link with at least one other PRS device;

\_\_\_\_\_ establishing a data link with a positioning data transmitter and receiving positioning data from said positioning data transmitter;

\_\_\_\_\_ processing said positioning data to determine location-based information associated with the PRS device;

\_\_\_\_\_ modulating said positioning data onto a carrier signal which can be transmitted over said private, two-way, short-range voice communications link, and transmitting said modulated positioning data to said another PRS device;

\_\_\_\_\_ receiving modulated positioning data from said at least one other PRS device over said private, two-way short-range voice communications link, and demodulating said received modulated positioning data, said demodulating step comprising the steps of receiving a modulated identification tone in a carrier signal from said another PRS device over said private, two-way short-range voice communications link; demodulating said received modulated identification tone; and, decoding positioning data in said identification tone;

\_\_\_\_\_ processing said demodulated positioning to determine further location-based information associated with said at least one other PRS device; and,

\_\_\_\_\_ displaying said location-based information and said further location-based information in the PRS device,



whereby said displaying of said location-based information and said further location-based information can indicate a relative position of each PRS device participating in said two-way short-range voice communications link.

20. (Currently Amended) A ~~The~~ machine readable storage having stored thereon a computer program for Personal Radio Services (PRS) communications in a PRS device, the computer program comprising a routine set of instructions which when executed by a machine causes the machine to perform of claim 16, further comprising the steps of:

establishing a private, two-way, short-range voice communications link with at least one other PRS device;

establishing a data link with a positioning data transmitter and receiving positioning data from said positioning data transmitter;

processing said positioning data to determine location-based information associated with the PRS device;

modulating said positioning data onto a carrier signal which can be transmitted over said private, two-way, short-range voice communications link, encoding said positioning data using a privacy code prior to said transmission, said privacy code restricting access to said positioning data by other PRS devices, and transmitting said modulated positioning data to said another PRS device;

receiving modulated positioning data from said at least one other PRS device over said private, two-way short-range voice communications link, and demodulating said received modulated positioning data;

processing said demodulated positioning to determine further location-based information associated with said at least one other PRS device; and,

displaying said location-based information and said further location-based information in the PRS device,

whereby said displaying of said location-based information and said further location-based information can indicate a relative position of each PRS device participating in said two-way short-range voice communications link.